Claims

1. A method for producing submerged bondable terminal pads (AF) in a component containing at least two joined substrates (S1, S2),

- wherein there is a first substrate (S1) including electrically conductive component structures, where the component structures are electrically connected to the forenamed terminal pads (AF), which are located on a surface of the first substrate (S1),

- wherein grooves (G) with a specified depth, which delimit at least one cutout (AS) are produced in a surface of a second substrate (S2),

- wherein the first and the second substrate are joined together in such a way that the surfaces of the two substrates that are provided with the terminal pads and the grooves face each other,

- wherein incisions (ES) are produced over the grooves from the back of the second substrate, which is now on the outside, to a depth such that the grooves (G) are opened there,

- wherein at least one cutout (AS) is removed, so that the contact pads (AF) are exposed.

2. The method as recited in claim 1, wherein the grooves (G) and the incisions (ES) following the grooves are produced in straight lines running over the entire second substrate (S2), wherein the incisions are produced by sawing, and wherein a cutout (AS) for exposing the terminal pads (AF) is defined between each pair of grooves.

3. The method as recited in claim 2, wherein each case a plurality of terminal pads (AF) of the first substrate (S1) are positioned side by side in a row, and wherein each of the cutouts (AS) exposes one of the rows of terminal pads (AF).

4. The method as recited in one of claims 1 through 3, wherein the grooves (G) are produced by wet chemical etching, ion beam etching or plasma etching.

5. The method as recited in claim 4, wherein the grooves (G) are defined by means of a resistance mask which is structured photolithographically.

6. The method as recited in one of claims 1 through 3, wherein the grooves (G) are produced by laser cutting.

7. The method as recited in one of claims 1 through 6, wherein the grooves (G) are produced to a depth which is greater than the cutting depth precision of the sawing procedure when producing the incisions (ES).

8. The method as recited in one of claims 1 through 7, wherein before the surfaces of the two substrates (S1, S2) are joined at least one of the surfaces is shaped so that after they are joined a free clearance is produced over the terminal pads (AF) at a distance from the corresponding surfaces of the second substrate (S2).

9. The method as recited in one of claims 1 through 7, wherein before the surfaces are joined a covering is produced on the first substrate (S1) at least over the terminal pads (AF) or under the later cutout (AS) of the second substrate (S2), so that when they are joined direct adhesion of the second substrate to the terminal pads is prevented, and wherein the covering is removed again after the cutout is produced.

10. The method as recited in one of claims 1 through 9, wherein the procedure for joining the substrates (S1, S2) includes one of the following measures: glass bonding, bonding by means of bumps, anodic bonding, eutectic bonding, direct bonding of substrate surfaces consisting of semiconductor material, or gluing.

11. The method as recited in one of claims 1 through 10, wherein wafers are employed as substrates (S1, S2), with a plurality of components being formed at least in the first substrate, which are separated after the terminal pads (AF) are exposed.

12. The method as recited in claim 11, wherein the terminal pads (AF) of each component are arranged in rows which are directly adjacent to edges of the individual component, with the rows of directly adjacent components running beside each other, and wherein each cutout (AS) the two adjacent rows of terminal pads of adjacent components are exposed.

13. The method as recited in one of claims 1 through 12, wherein at least one of the substrates (S1, S2) microelectrical, micro-optical or micro-mechanical components or combined components of the forenamed types are realized.